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# *Sheetlines*

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“Ordnance Survey and cartographic style:  
keeping the good view (part 2)”

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The Charles Close Society was founded in 1980 to bring together all those with an interest in the maps and history of the Ordnance Survey of Great Britain and its counterparts in the island of Ireland. The Society takes its name from Colonel Sir Charles Arden-Close, OS Director General from 1911 to 1922, and initiator of many of the maps now sought after by collectors.

The Society publishes a wide range of books and booklets on historic OS map series and its journal, *Sheetlines*, is recognised internationally for its specialist articles on Ordnance Survey-related topics.

## ***Ordnance Survey and cartographic style: keeping the good view (part 2)***<sup>1</sup>

***Alexander J Kent***

### ***What makes Ordnance Survey's cartographic style so distinctive?***

In light of the investigation outlined in part 1, it is possible to highlight certain characteristics which set Ordnance Survey's current 1:50,000 *Landranger* topographic maps aside from their European counterparts. Briefly, these are:

- Prominent motorway symbols
- Prominent tourist symbols
- Recessive national boundaries
- The use of grey (*not* green) to represent 'Park or ornamental ground'
- The attention given to archaeological features (probably an enduring aspect of William Roy's landscape classification).

In general, the OS *Landranger* map is dominated by road symbols, with a high proportion of symbols dedicated to showing tourism and sport, historical features, managed land, and especially paths. It has the least extensive railway symbology. The relative deficiency of other types of symbol suggests a perception of the landscape as a commodity, where the map is consciously designed with leisure users in mind, particularly those travelling by road (given the high proportion of road symbols). Moreover, one further characteristic which is not shared with any other map analysed in part 1 (except that of Ordnance Survey Ireland) is the use of a location-specific photograph on the map cover. As others show a diagram of the geographical area covered instead, this perhaps supports the view that 1:50,000 paper maps of the British Isles are intended first and foremost as leisure products. This is not all that surprising if commercially produced topographic mapping at this scale is more widely available in other European countries and occupies more of the leisure map market.<sup>2</sup> (An aspect well worth further study.)

### ***Visualizing the stylistic evolution of British and Irish maps***

Despite advances in technology since the rise of European national surveys in the eighteenth and nineteenth centuries, state topographic maps tend to be very conservative in their design. Dorling and Fairbairn (1997) go so far as to claim that the legend of a 1990s 1:50,000 topographic map would have been understandable and usable (apart from the detailed road and railway classification) by a 1790s cavalry officer! Indeed it is not difficult to make visual associations between surveyors' drawings produced towards the end of the eighteenth century for the first Ordnance Survey maps and the Survey's maps of today.<sup>3</sup>

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<sup>1</sup> Part 1 appeared in *Sheetlines* 87.

<sup>2</sup> As we were told during a CCS visit, there are around 200 geodetic companies in Slovenia – a country with a population of two million (Davies *et al.*, 2007).

<sup>3</sup> Many images are accessible at <http://www.bl.uk/onlinegallery/onlineex/ordsurvdraw/>

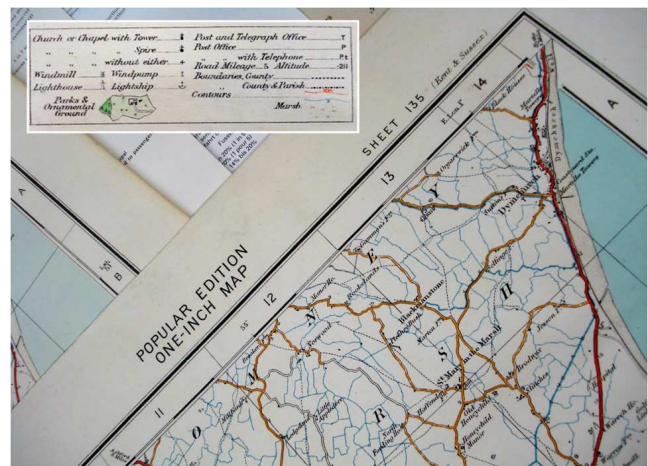
The imperatives behind topographic mapping, which give rise to choices in the classification of landscape, are preserved in paper maps and this facilitates the comparative analysis of map series from different periods. Where this classification has evolved, it may be reflected in the map's content through changes in the relative proportions of features, as represented by the symbology.

So with a view to investigating the stylistic grouping of the maps of Great Britain and Ireland identified in part 1 in more detail, contemporary maps from both countries spanning over 100 years were compared and analysed (*table 1*). The method follows the construction of the typology as per the pan-European investigation, which allows star plots to be generated in order to visualize their stylistic evolution.

Map Series	Scale	Publication Date of Sample Sheet
New Series (Temporary Advance Edition with hills)	1:63 360	1894
Revised New Series	1:63 360	1898
Third Edition (Outline)	1:63 360	1905
Fourth Edition	1:63 360	1912
Fifth Edition	1:63 360	1933
New Popular Edition	1:63 360	1946
Seventh Series	1:63 360	1967
1:50 000 First Series	1:50 000	1974
1:50 000 Second Series	1:50 000	2004
Second Edition	1:63 360	1901
Third Edition	1:63 360	1912
GSGS 4136 Third Edition	1:63 360	1942
1:50 000 Map of Ireland	1:50 000	1984
1:50 000 Discovery Series (Third Edition)	1:50 000	2003

*Table 1: The British and Irish maps analysed (Great Britain above, Ireland below)*

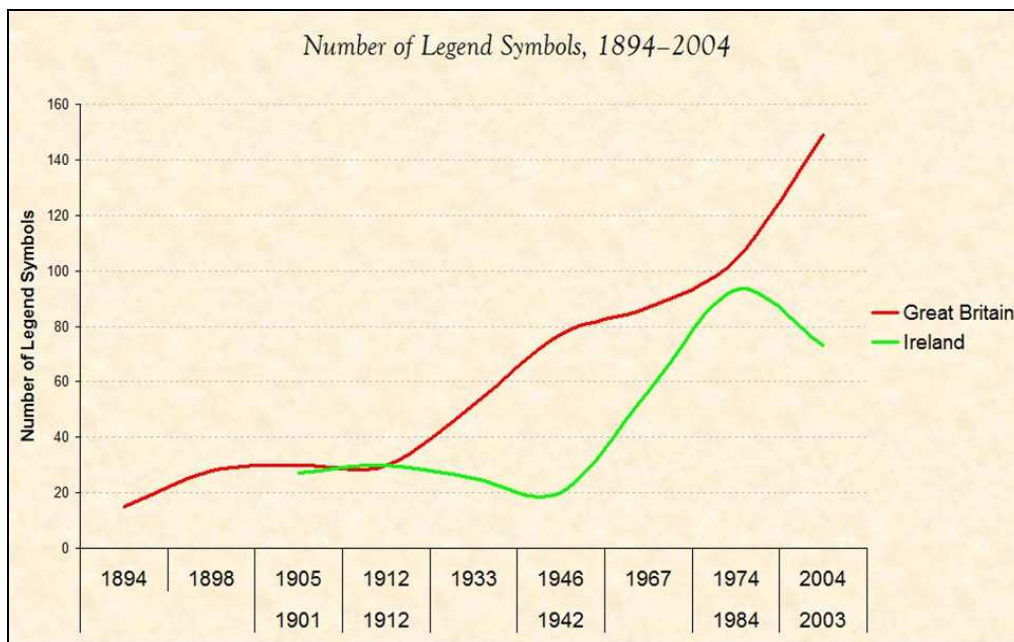
One major difference between the first Ordnance Survey maps of the early nineteenth century and those produced much later is the introduction of the legend itself, on which this brief investigation is based. The choice of symbols included in the legend bears particular significance (*figure 12*) because it reveals an insight into what is perceived to be of the greatest use to the reader and suggests the intended role of the 'general purpose' map. For example,



*Fig. 12: Legends used to be much smaller!*

with reference to the one-inch map, Hodson (2005) notes the introduction of a key in the 1880s, and, in particular, its classification system for roads, going on to call this an acknowledgement that the primary function of the one-inch map was (by then) to serve as a road map for the public.

The first observation to make in this brief investigation is that legend symbologies generally become more exhaustive in describing the range of symbols utilized throughout the topographic map series (*figure 13*). Another observation regarding the total number of legend symbols is the divergence after the 1:50,000 Map of Ireland series (produced jointly by Ordnance Survey of Northern Ireland and Ordnance Survey Ireland). It would appear that the most recent Discovery Series is a move towards the establishment of a new national style of cartography and away from the cartographic legacy of Ireland's colonial past. (Of course, this is purely speculative at this stage.) In contrast, the number of symbols comprising the legends of OSGB map series demonstrates a steady growth over time and the dominant types of features remain roughly similar (*figure 14*). It is also clear that with the introduction of the 1:50,000 First Series ended what had been a prominent feature, that of railway symbology.



*Figure 13: Line graph showing the number of legend symbols over time*

This series of star plots serves to illustrate that the cartographic styles of British and Irish maps follow a very similar pattern in their classification of landscape as their legend symbologies have developed. Although the Irish symbologies tend to utilize fewer symbols overall, their emphasis on infrastructure, and, more recently, tourist features, demonstrates their resemblance to the British style. Of course, there is no doubt that the legacy of Ordnance Survey in Ireland (following the Spring-Rice Report of 1824) has played a fundamental role in this particular historical association, whether the portrayal of landscape has been (or is) congruous with Irish culture and society or not.

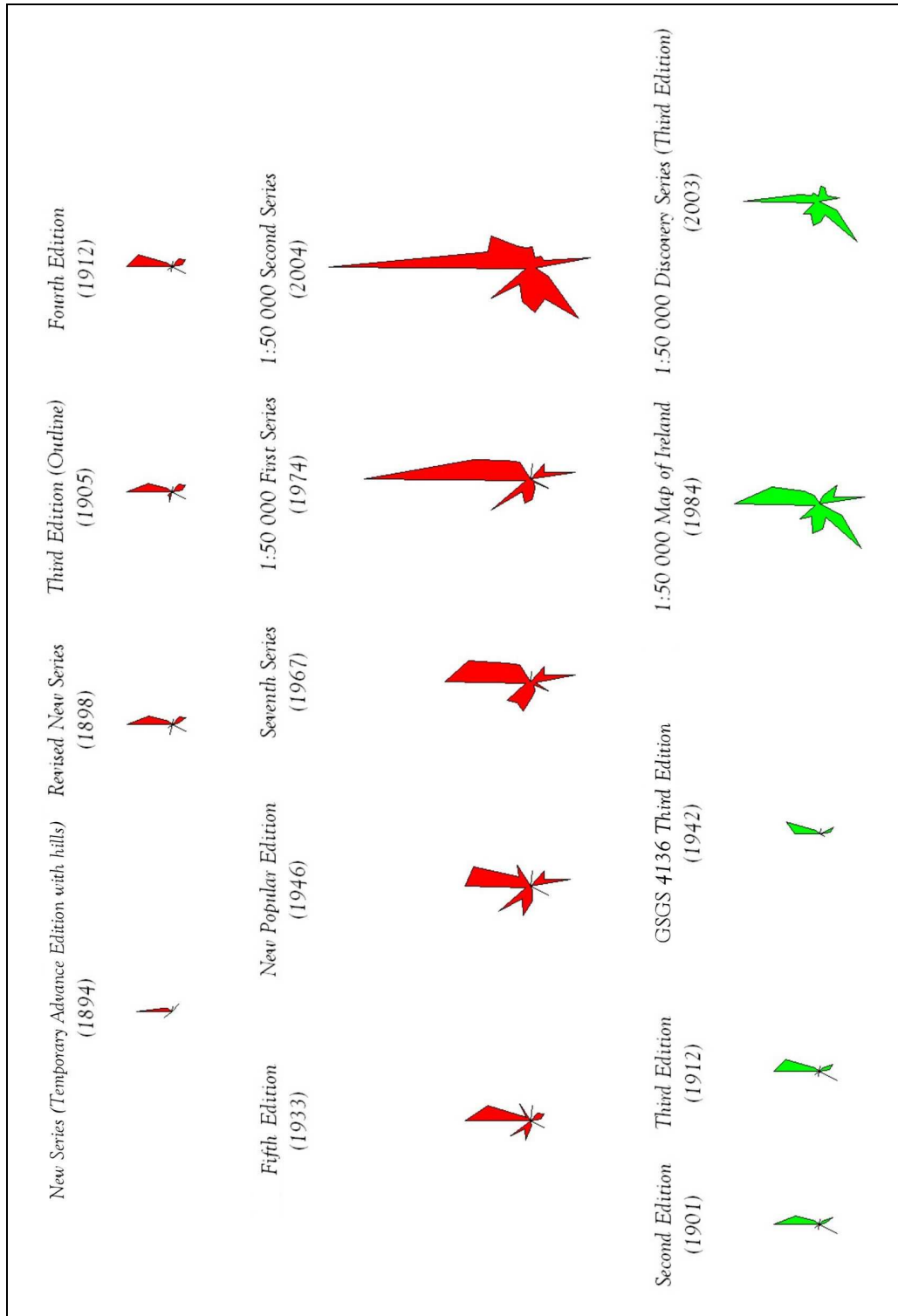


Figure 14: Star plots (axes as figure 10 in part 1) illustrating the stylistic evolution of British and Irish maps

A more detailed investigation, incorporating the intermediate map series to improve the resolution of the observation, and the inclusion of the mapping of Northern Ireland, therefore present some necessary avenues for further research.

### ***Conclusion***

Style is important in state topographical mapping, not least because as there will always be a need to construct and disseminate an idea of the national landscape which conforms to certain cultural traditions, and through the strategic selection and appearance of features, style acts as a vehicle through which to achieve this. There is much diversity in Europe, from its physical landscapes to its cultures, and this diversity is reflected in the cartographic styles of its 1:50,000 state topographic mapping. The styles employed by the national mapping organizations of Great Britain and Ireland exhibit the greatest similarity, and these are also especially distinctive. This observation is based on the similarity of their landscape classifications (as derived from the legacy of colonial survey), however, rather than the graphical appearance of their symbologies, and suggests that the fundamental choice involved in topographical mapping, i.e. the selection of features from the land, has the most profound and lasting effect on state cartographic style.

If cartography uses its own particular language to describe spatial relationships, it is easy to see how state topographic map symbologies can – and do – provide a vocabulary for expressing the national landscape. Even from the brief comparisons illustrated in these two articles, it is possible to see how national mapping organizations maintain different approaches and have become more articulate over time as their vocabulary has evolved. It is also clear that the legacy of former colonial powers continues in the current symbolization of landscape, particularly in which features dominate map symbology. But topographic maps are slow to evolve (which might also explain the absence of any symbol representing a mosque in any of the symbologies examined) and in this sense they are perhaps now in more danger of becoming irrelevant than ever before. The International Map of the World, proposed by Albrecht Penck in 1891, ultimately did not succeed because of its failure to harmonize the specifications of its symbology with the developments in technology that were transforming mass transportation, and with the national landscapes it portrayed. Like Esperanto, its symbology was an artificial language that did not carry a sufficient power of expression.

It is over 200 years since Ordnance Survey published its first topographic maps for the nation. Since then, its cartographic style has evolved to meet the changing demands of its users, both military and civilian, but I believe it has always preserved something authentic in its portrayal of the national landscape; something with which its users can identify and recognize. The ability to harness the power of expression and preserve this authenticity through good cartography and its tempering to public scrutiny – including how its maps are accessed – will be essential for the next 200 years.

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